



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,487	10/26/2005	Roger Abadia	17170/014001	6548
22511	7590	08/03/2006	EXAMINER	
OSHA LIANG L.L.P. 1221 MCKINNEY STREET SUITE 2800 HOUSTON, TX 77010			TA, THO DAC	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/554,487

Applicant(s)

ABADIA, ROGER

Examiner

Tho D. Ta

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-12 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/26/05</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

2. Claims 3-6 are objected to because of the following informalities: claim 3, line 2, the limitation "the tight sliding guide 12" lacks antecedent basis; claim 4, line 1, the limitation "the first hole" lacks antecedent basis; claim 5, line 2, the limitation "the two holes" lacks antecedent basis; claim 6, line 1, the limitation "the housing 18" lacks antecedent basis; claim 6, lines 2 and 3, the limitation "the associated housing" lacks antecedent basis. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2833

4. Claims 1-3, 6-8, 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Enomoto et al. (5,340,319).

In regard to claim 1, Enomoto et al. discloses an inserted electrical connector for interlinking two superimposed electronic circuits 34, 35, comprising electrically conducting plugs 4 each of which is intended to ensure an electrical connection between a first electrical contact area 14 borne by the first electronic circuit 35 and a second electrical contact area 13 borne by the second electrical circuit 34, wherein it comprises a base 3 made of electrically insulating material with plugs 4, a guide 2 made of electrically insulating material, and a guiding means attached thereto and located between the guide 2 and the base 3, wherein at least some of the plugs 4 project from the base 3 so that the free end of each one can fit into and slide in a housing 11 passing through the guide 2, and wherein the guiding means comprise a projecting first part 5A, 5B attached to the base 3 and an additional second part 28 mounted on the first part 5A, 5B and attached to the guide 2.

In regard to claim 2, Enomoto et al. discloses that the first part 5A, 5B of the guiding means projects from the base 3 to a height greater than that of the projecting part of the plugs 4 above the base 3 (see fig. 1).

In regard to claim 3, Enomoto et al. discloses that the plugs 4 are inserted into the associated housings 11 passing through the tight sliding guide 2, with an even tighter sliding assembly located between the two parts 5A, 5B of the guiding means.

In regard to claim 6, Enomoto et al. discloses that the plugs 4 are mounted in the housings 12 of the base 3 with a tighter fit than that existing between the plugs 4 and the associated housings 11 of the guide 2 (fig. 6 shows gap in housing 11 and no gap in housing 12).

In regard to claim 7, Enomoto et al. discloses that the first part 5A, 5B of the guiding means comprises posts 24 each of which fits tightly so as to slide in an additional hole 28 made in the guide 2 and comprising the second part of the guiding means.

In regard to claim 8, Enomoto et al. discloses that the base 3 is equipped with means 25 in the shape of projections for attaching the base 3 to another electronic circuit 35, known as the first circuit.

In regard to claim 12, Enomoto et al. discloses that the first part 5A, 5B of the guiding means forms one piece with the base 3.

In regard to claims 13, 14, the limitations "power stage, control stage, electronic command, control box of an automobile alternator-starter" have not been given a significant patentable weight because it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not

Art Unit: 2833

differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

In regard to claim 15, Enomoto et al. discloses that the guide 2 is intended to occupy a premounting position whereby the guide 2 covers the free ends of the plugs 4 and a mounting position whereby the free ends of the plugs 4 are uncovered (see fig. 6).

In regard to claim 16, Enomoto et al. discloses that means (the pointed free end tip of 5A, 5B) are contemplated for maintaining the guide 2 in its premounting position.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto et al. in view of Coller et al. (4,558,912).

In regard to claim 4, Enomoto et al. does not disclose that the plugs 4 pass through the first holes of one of the electronic circuits 34, known as the second circuit, with more play than that existing between the plugs 4 and the associated housings 11 of the guide 2.

Coller et al. discloses that the plug 52 passes through the first hole 6 of the electronic circuits 4, with more play than that existing between the plug 52 and the associated housing 28 of the guide 24.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Enomoto et al. by constructing the through hole as disclosed by Coller et al. in order to facilitate the mounting of the plug into the electronic circuit.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto et al. in view of Zell (4,173,387).

In regard to claim 9, Enomoto et al. does not disclose that the projections comprise pins 25 with flanged tabs on their free end owing to at least one groove and wherein the pins 25 are intended to pass through an additional opening in the first circuit 35 in order to be attached by snapping onto the base 3 on the first circuit 35.

Zell discloses that the projections comprise pins 20 with flanged tabs 28 on their free end owing to at least one groove and wherein the pins 20 are intended to pass through an additional opening 68 in the first circuit 64 in order to be attached by snapping onto the base 10 on the first circuit 64.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Enomoto et al. by constructing the projection as disclosed by Zell in order to provide a better board retaining mechanism.

8. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto et al.

In regard to claim 10, Enomoto et al. discloses that the plugs 4 comprise metal tabs with a head, comprising the free end of the tab 4 in a penetrating shape.

However, Enomoto et al. is silent about the cross section shape of the plug 4 and a foot of the tab 4 does not extend at 90 degree to the plane of the tab 4.

Official Notice is taken that both the concept and the advantages of providing a surface mounting which a foot of the tab extending at 90 degree to the plane of the tab are well known and expected in the art.

In regard to the cross section shape of the tab, it would have been obvious to modify Enomoto et al. by having the cross section with rectangular shape since applicant has presented no explanation that this particular configuration of the cross section is significant or is anything more than one of numerous configurations a person of ordinary skill in the art would find obvious for the purpose of providing mating surfaces between two edges. A change in shape is generally recognizing as being within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 1976).

In regard to claim 11, Enomoto et al. discloses that the foot is intended to make electrical contact with the first electrical contact area of the first circuit 35.



***Allowable Subject Matter***

9. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: In regard to claim 5, the prior art fails to provide, teach or suggest the first part of the guiding means passes through the two holes of the second circuit with less play than that between the plugs and the first holes (the first part of the guiding means of Enomoto does not pass through the hole of the second circuit) .

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2833

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



THO D. TA  
PRIMARY EXAMINER